

while examiners in the Patent Office: enables MUNN & Co. to do everything appertaining to patents **WRITERS** and **CHEAPERS** than any other reliable agency.

HOW TO OBTAIN PATENTS

This is the closing inquiry in nearly every letter, describing some invention which comes to this office. A *positive* answer can only be had by presenting a complete application for a patent to the Commissioner of Patents. An application consists of a Model, Drawings, Petition, Oath, and full Specification. Various official rules and formalities must also be observed. The efforts of the inventor to do all this business himself are generally without success. After great perplexity and delay, he is usually glad to seek the aid of persons experienced in patent business, and have all the work done over again. The best plan is to solicit proper advice at the beginning. If the parties consulted are honorable men, the inventor may safely confide his ideas to them; they will advise whether the improvement is probably patentable, and will give him all the directions needful to protect his rights.

How Can I Best Secure My Invention?

This is an inquiry which one inventor naturally asks another, who has had some experience in obtaining patents. His answer generally is as follows, and correct: Construct a neat model, not over a foot in any dimension—smaller if possible—and send by express, prepaid, addressed to MUNN & Co., 37 Park Row, together with a description of its operation and merits. On receipt thereof, they will examine the invention carefully, and advise you as to its patentability, free of charge. Or, if you have not time, or the means at hand, to construct a model, make as good a pen and ink sketch of the improvement as possible and send by mail. An answer as to the prospect of a patent will be received, usually, by return of mail. It is sometimes best to have a search made at the Patent Office; such a measure often saves the cost of an application for a patent.

Preliminary Examination.

In order to have such search, make out a written description of the invention, in your own words, and a pencil, or pen and ink, sketch. Send these, with the fee of \$5, by mail, addressed to MUNN & Co., 37 Park Row, and in due time you will receive an acknowledgment thereof, followed by a written report in regard to the patentability of your improvement. This special search is made with great care, among the models and patents at Washington, to ascertain whether the improvement presented is patentable.

To Make an Application for a Patent.

The applicant for a patent should furnish a model of his invention if susceptible of one, although sometimes it may be dispensed with; or, if the invention be a chemical production, he must furnish samples of the ingredients of which his composition consists. These should be securely packed, the inventor's name marked on them, and sent by express, prepaid. Small models, from a distance, can often be sent cheaper by mail. The safest way to remit money is by a draft, or postal order, on New York, payable to the order of MUNN & Co. Persons who live in remote parts of the country can usually purchase drafts from their merchants on their New York correspondents.

Foreign Patents.

The population of Great Britain is 31,000,000; of France, 37,000,000; Belgium, 5,500,000; Austria, 36,000,000; Prussia, 40,000,000; and Russia, 70,000,000. Patents may be secured by American citizens in all these countries. Now is the time, when business is dull at home, to take advantage of these immense foreign fields. Mechanical improvements of all kinds are always in demand in Europe. There will never be a better time than the present to take patents abroad. We have reliable business connections with the principal capitals of Europe. A large share of all the patents secured in foreign countries by Americans are obtained through our Agency. Address MUNN & Co., 37 Park Row, New York. Circulars with full information on foreign patents, furnished free.

Caveats.

Persons desiring to file a caveat can have the papers prepared in the shortest time, by sending a sketch and description of the invention. The Government fee for a caveat is \$10. A pamphlet of advice regarding applications for patents and caveats is furnished gratis, on application by mail. Address MUNN & Co., 37 Park Row, New York.

Value of Extended Patents.

Did patentees realize the fact that their inventions are likely to be more productive of profit during the seven years of extension than the first full term for which their patents were granted, we think more would avail themselves of the extension privilege. Patents granted prior to 1861 may be extended for seven years, for the benefit of the inventor, or of his heirs in case of the decease of the inventor, by due application to the Patent Office, ninety days before the termination of the patent. The extended time inures to the benefit of the inventor, the assignees under the first term having no rights under the extension except by special agreement. The Government fee for an extension is \$100, and it is necessary that good professional service be obtained to conduct the business before the Patent Office. Full information as to extensions may be had by addressing MUNN & Co., 37 Park Row, New York.

Trademarks.

Any person or firm domiciled in the United States, or any firm or corporation residing in any foreign country where similar privileges are extended to citizens of the United States, may register their designs and obtain protection. This is very important to manufacturers in this country, and equally so to foreigners. For full particulars address MUNN & Co., 37 Park Row, New York.

Design Patents.

Foreign designers and manufacturers, who send goods to this country, may secure patents here upon their new patterns, and thus prevent others from fabricating or selling the same goods in this market.

A patent for a design may be granted to any person whether citizen or alien, for any new and original design for a manufacture, bust, statue, alto relieve, or bas relief;

any new and original design for the printing of woolen, silk, cotton, or other fabrics, any new and original impression, ornament, pattern, print, or picture, to be printed, painted, cast, or otherwise placed on or worked into any article of manufacture.

Design patents are equally as important to citizens as to foreigners. For full particulars send for pamphlet to MUNN & Co., 37 Park Row, New York.

Copies of Patents.

Persons desiring any patent issued from 1836 to November 26, 1867, can be supplied with official copies at a reasonable cost, the price depending upon the extent of drawings and length of specification.

Any patent issued since November 27, 1867, at which time the Patent Office commenced printing the drawing and specifications, may be had by remitting to this office \$1.

A copy of the claims of any patent issued since 1860 will be furnished for \$1.

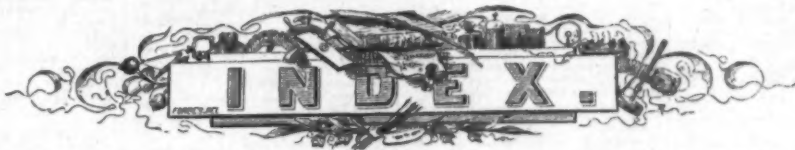
When ordering copies, please to remit for the same as above, and state name of patentee, title of invention, and date of patent. Address MUNN & Co., Patent Solicitors 37 Park Row, New York.

MUNN & Co. will be happy to see inventors in person at their office, or to advise them by letter. In all cases they may expect an *honest opinion*. For such consultations, opinions, and advice, no charge is made. Write plain; do not use pencil or pale ink; be brief.

All business committed to our care, and all consultations, are kept *secret and strictly confidential*.

In all matters pertaining to patents, such as conducting interferences, procuring extensions, drawing assignments, examinations into the validity of patents, etc. special care and attention is given. For information and for pamphlets of instruction and advice,

Address
MUNN & Co.,
PUBLISHERS SCIENTIFIC AMERICAN,
37 Park Row, New York.
OFFICE IN WASHINGTON—Corner F and 7th Streets, opposite Patent Office.



ILLUSTRATIONS.

	Pan, the first automatic	119	Ox bow, Moore's	166	Transferring motion, device for	182	Auroral phenomena	49
	Feeding and watering cattle in	120	Onze generator, Tisley's	167	Benson's	183	Austrian farmer's entertainment	51
A	transit, Bonser's system of	374			Trap, the	245	Canon, revolver	51
	Feed water heater and purifier,				Treap protector, a simple	210	Canon of Colorado, the great	51
	France's	148			Tricycle wheel, Craik's	246	Caschoutch, from common plants	389
Air engine, the hot	37		Palm of Brazil, the <i>poschibus</i>	229	V		Caschoutch, new derivatives from	389
Albino robin, an	386		Palm, the <i>oreodoxa regia</i>	371	Ventilator, screw car, Schopp's	86	Caschoutch, where it comes from	389
Amazonas, the mouth of the	386		Paper feeding machine, Baker &	38	Vienna exposition, the great ma-	146	Capillarity, a phenomenon of	146
Ant, the honey-making	190		Schofield's	38	chinery hall at the	146	Carbonic acid	245
Aquarium, the Brighton	375		Pardee Hall and the water	389	Vienna exposition, the Japanese	279	Carbonic acid, improved	245
			Flat-breaking machine, Bray-	1	Vienna exposition, the Persian	146	Car brake, improved	245
			ton & Co.'s	389	pavilion at the	146	Car coupling, automatic	245
Balloon, M. de Lome's great	35		Peripolar induction apparatus,	1	Vienna exposition, the Turkish	167	Car coupling, automatic	245
Balloon, the great transatlan-	159		Le Roux's	389	pavilion at the	167	Carriage, clearing	245
Balloon, the great transatlan-	159		Preceptor, self-feeding, Ham-	379	Vienna exposition, the Turkish	167	Carriage, clearing	245
Bath, Turkish	62		ilton's	379	pavilion at the	167	Carriage, clearing	245
Beetle, life in the	3		Piggon, the mechanical	18	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Pig feeder, McElraith & Hough-	66	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		ton's	66	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Plaster of Paris, the manufac-	253	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		turer of	253	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Pipe coupling, Dunning's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Pipe, match, Edwards	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Planetary motion	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Plaster of Paris, the manufac-	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		turer of	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Plate-bending machine	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Flow attachment, Donnelly's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Gait, farm, Gillespie's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Ghost, repper's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Gilliot, the late Joseph	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, Gardner's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's	354	Vienna exposition, the Turkish	167	Carriage, clearing	245
Beetle, the common	15		Governor, turbine, Terrence's					

379 Gages, petroleum and pine tar, F. 2
 380 Gages, the glass, matters in, 252
 381 Gages through membranes, pass-
 382 age of, 252
 383 Gas from crude petroleum, 192
 384 Gas-making, improvement in, 304
 385 Gas, the American, 192
 386 Gas purifier and mixer, 405
 387 Gas, purifying coal, 289
 388 Gas retorts, charging, etc., 70
 389 Gas, the American, 192
 390 Gas well in Michigan, 248
 391 Gas well, the greatest, 49
 392 Gate and signal, railroad, 214
 393 Gate, the American, 192
 394 Gelling gun, another trial of the, 308
 395 Gelling gun trials, the, 308
 396 Gelatin solutions, preserving, 340
 397 Generation, spontaneous, 112
 398 Geological investigations, recent, 117
 399 Germ theory and its relation to
 400 hygiene, the, 357, 376, 392
 401 Gilding on china, 221
 402 Gilding, the, 221
 403 Gilott, Mr. Joseph, 271
 404 Girders and floor beams, cross-
 405 bridging, 53
 406 Glazing, the, 266
 407 Glazing, the, 266
 408 Glazing earthenware, 261
 409 Glucose, 210
 410 Glycerin, dissolving action of, 210
 411 Gold, large bar of, 210
 412 Gold dust and gold, 210
 413 Gold for dentists, crystal, 124
 414 Gold in Finland, 21
 415 Gold, the, 21
 416 Gold plating solution, 21
 417 Gold, silver, etc., precipitating, 123
 418 Gold wash, 21
 419 Governor, improvement, 391
 420 Governor, the, 391
 421 Governor, the, 391
 422 Governor, the, 391
 423 Governor, the, 391
 424 Governor, the, 391
 425 Governor, the, 391
 426 Governor, the, 391
 427 Governor, the, 391
 428 Governor, the, 391
 429 Governor, the, 391
 430 Governor, the, 391
 431 Governor, the, 391
 432 Governor, the, 391
 433 Governor, the, 391
 434 Governor, the, 391
 435 Governor, the, 391
 436 Governor, the, 391
 437 Governor, the, 391
 438 Governor, the, 391
 439 Governor, the, 391
 440 Governor, the, 391
 441 Governor, the, 391
 442 Governor, the, 391
 443 Governor, the, 391
 444 Governor, the, 391
 445 Governor, the, 391
 446 Governor, the, 391
 447 Governor, the, 391
 448 Governor, the, 391
 449 Governor, the, 391
 450 Governor, the, 391
 451 Governor, the, 391
 452 Governor, the, 391
 453 Governor, the, 391
 454 Governor, the, 391
 455 Governor, the, 391
 456 Governor, the, 391
 457 Governor, the, 391
 458 Governor, the, 391
 459 Governor, the, 391
 460 Governor, the, 391
 461 Governor, the, 391
 462 Governor, the, 391
 463 Governor, the, 391
 464 Governor, the, 391
 465 Governor, the, 391
 466 Governor, the, 391
 467 Governor, the, 391
 468 Governor, the, 391
 469 Governor, the, 391
 470 Governor, the, 391
 471 Governor, the, 391
 472 Governor, the, 391
 473 Governor, the, 391
 474 Governor, the, 391
 475 Governor, the, 391
 476 Governor, the, 391
 477 Governor, the, 391
 478 Governor, the, 391
 479 Governor, the, 391
 480 Governor, the, 391
 481 Governor, the, 391
 482 Governor, the, 391
 483 Governor, the, 391
 484 Governor, the, 391
 485 Governor, the, 391
 486 Governor, the, 391
 487 Governor, the, 391
 488 Governor, the, 391
 489 Governor, the, 391
 490 Governor, the, 391
 491 Governor, the, 391
 492 Governor, the, 391
 493 Governor, the, 391
 494 Governor, the, 391
 495 Governor, the, 391
 496 Governor, the, 391
 497 Governor, the, 391
 498 Governor, the, 391
 499 Governor, the, 391
 500 Governor, the, 391
 501 Governor, the, 391
 502 Governor, the, 391
 503 Governor, the, 391
 504 Governor, the, 391
 505 Governor, the, 391
 506 Governor, the, 391
 507 Governor, the, 391
 508 Governor, the, 391
 509 Governor, the, 391
 510 Governor, the, 391
 511 Governor, the, 391
 512 Governor, the, 391
 513 Governor, the, 391
 514 Governor, the, 391
 515 Governor, the, 391
 516 Governor, the, 391
 517 Governor, the, 391
 518 Governor, the, 391
 519 Governor, the, 391
 520 Governor, the, 391
 521 Governor, the, 391
 522 Governor, the, 391
 523 Governor, the, 391
 524 Governor, the, 391
 525 Governor, the, 391
 526 Governor, the, 391
 527 Governor, the, 391
 528 Governor, the, 391
 529 Governor, the, 391
 530 Governor, the, 391
 531 Governor, the, 391
 532 Governor, the, 391
 533 Governor, the, 391
 534 Governor, the, 391
 535 Governor, the, 391
 536 Governor, the, 391
 537 Governor, the, 391
 538 Governor, the, 391
 539 Governor, the, 391
 540 Governor, the, 391
 541 Governor, the, 391
 542 Governor, the, 391
 543 Governor, the, 391
 544 Governor, the, 391
 545 Governor, the, 391
 546 Governor, the, 391
 547 Governor, the, 391
 548 Governor, the, 391
 549 Governor, the, 391
 550 Governor, the, 391
 551 Governor, the, 391
 552 Governor, the, 391
 553 Governor, the, 391
 554 Governor, the, 391
 555 Governor, the, 391
 556 Governor, the, 391
 557 Governor, the, 391
 558 Governor, the, 391
 559 Governor, the, 391
 560 Governor, the, 391
 561 Governor, the, 391
 562 Governor, the, 391
 563 Governor, the, 391
 564 Governor, the, 391
 565 Governor, the, 391
 566 Governor, the, 391
 567 Governor, the, 391
 568 Governor, the, 391
 569 Governor, the, 391
 570 Governor, the, 391
 571 Governor, the, 391
 572 Governor, the, 391
 573 Governor, the, 391
 574 Governor, the, 391
 575 Governor, the, 391
 576 Governor, the, 391
 577 Governor, the, 391
 578 Governor, the, 391
 579 Governor, the, 391
 580 Governor, the, 391
 581 Governor, the, 391
 582 Governor, the, 391
 583 Governor, the, 391
 584 Governor, the, 391
 585 Governor, the, 391
 586 Governor, the, 391
 587 Governor, the, 391
 588 Governor, the, 391
 589 Governor, the, 391
 590 Governor, the, 391
 591 Governor, the, 391
 592 Governor, the, 391
 593 Governor, the, 391
 594 Governor, the, 391
 595 Governor, the, 391
 596 Governor, the, 391
 597 Governor, the, 391
 598 Governor, the, 391
 599 Governor, the, 391
 600 Governor, the, 391
 601 Governor, the, 391
 602 Governor, the, 391
 603 Governor, the, 391
 604 Governor, the, 391
 605 Governor, the, 391
 606 Governor, the, 391
 607 Governor, the, 391
 608 Governor, the, 391
 609 Governor, the, 391
 610 Governor, the, 391
 611 Governor, the, 391
 612 Governor, the, 391
 613 Governor, the, 391
 614 Governor, the, 391
 615 Governor, the, 391
 616 Governor, the, 391
 617 Governor, the, 391
 618 Governor, the, 391
 619 Governor, the, 391
 620 Governor, the, 391
 621 Governor, the, 391
 622 Governor, the, 391
 623 Governor, the, 391
 624 Governor, the, 391
 625 Governor, the, 391
 626 Governor, the, 391
 627 Governor, the, 391
 628 Governor, the, 391
 629 Governor, the, 391
 630 Governor, the, 391

